

IN THE CLAIMS:

Please cancel claims 9-12, 17-23 and 26-29 without prejudice, resulting in the following listing of the claims. This listing replaces and supersedes all prior claim listings.

1. (Original) A transmission apparatus comprising:

an encoding means for encoding a transmission signal to generate at least a first transmission signal and a second transmission signal,

a transmission antenna forming at least a first beam and a second beam, and

a transmitting means for transmitting said first transmission signal riding on said first beam and transmitting said second transmission signal riding on said second beam,

wherein said first beam and second beam are formed so as to partially overlap each other.
2. (Original) A transmission apparatus as set forth in claim 1, wherein

the transmission antenna is an array antenna comprising a plurality of antenna elements.
3. (Original) A transmission apparatus as set forth in claim 2, wherein

the transmitting means weights the first transmission signal and the second transmission signal modulated to predetermined carrier frequencies with predetermined weights and supplies them to the antenna elements.
4. (Original) A transmission apparatus as set forth in claim 3, further comprising

a weight determining means for determining weights of the antenna elements and controlling the beam patterns of the first beam and the second beam.

5. (Original) A transmission apparatus as set forth in claim 4, wherein
the weight determining means determines the weights of the antenna elements in
accordance with the channel characteristics.

6. (Original) A transmission apparatus as set forth in claim 1, wherein
the encoding means includes a delay circuit for delaying the transmission signal by a
predetermined delay time.

7. (Original) A transmission method comprising:
a step of encoding a transmission signal to generate at least a first transmission signal and
a second transmission signal,
a step of modulating the first transmission signal and the second transmission signal to
predetermined carrier frequencies,
a step of weighting the first transmission signal by a first weight, supplying the same to
antenna elements constituting a transmission antenna, transmitting the same by forming a first
transmission beam and of weighting the second transmission signal by a second weight,
supplying the same to antenna elements, and transmitting the same by forming a second
transmission beam partially overlapping the first transmission beam.

8. (Original) A transmission method as set forth in claim 7, further determining the first
weight and the second weight in accordance with the channel characteristics.

9-12 (Canceled)

13. (Original) A communication system as set forth in claim 12, wherein
the weight determining means determines the weights of the antenna elements in
accordance with the channel characteristics.

14. (Original) A communication system as set forth in claim 9, wherein
the reception antenna is an array antenna comprising a plurality of antenna elements.

15. (Original) A communication system as set forth in claim 9, wherein
the reception antenna shapes the beam pattern of the receiving beam in accordance with
the transmission distortion of the channel.

16. (Original) A communication system as set forth in claim 9, further comprising
a separating receiving means for separating the received signal by the reception antenna.

17-23 (Canceled)

24. (Currently amended) A The contribution processing device ~~comprising: according to~~
claim 1,

~~receiving means for receiving image data of content supplied from a content providing~~
~~device over a network;~~

~~display means for displaying a content display screen~~
~~having a given contribution buttons displayed thereon, based on said image data received by said~~
~~receiving means;~~

~~contribution data creating means for creating contribution data equivalent to a given amount corresponding to said contribution button when the contribution button is selected on said content display screen; and~~

~~transmitting means for transmitting said contribution data created by said contribution data creating means to said content providing device over said network, wherein said contribution data is added to user information corresponding to a user who provides said content, and a service charge for supplying said content is charged to said user information.~~

25. (Currently amended) A The contribution processing method comprising: according to claim 5,

~~a receiving step of receiving image data of content which is supplied from a content providing device over a network;~~

~~a display step of displaying a content display screen having a given contribution button displayed thereon, based on said image data received by said receiving step;~~

~~a contribution data creating step of creating contribution data equivalent to a given amount corresponding to said contribution button when the contribution button is selected on said content display screen; and~~

~~a transmitting step of transmitting said contribution data created by said contribution data creating step of said content providing device over said network, wherein said contribution data is added to user information corresponding to a user who provides said content, and a service charge for supplying said content is charged to said user information.~~

26-29 (Canceled)